WE CLAIM

1.   A method, comprising: providing a measurement model that comprises measurement image information; locating a measurement area by utilizing the measurement image information; and performing at least one measurement to provide measurement result information.

2.   The method of claim 1 whereas the measurement modes further comprises edge information.

3.   The method of claim 2 whereas the stage of performing at least one measurement is responsive to the edge information.

4.   The method of claim 1 wherein the measurement model further comprises measurement information.

5.   The method of claim 4 wherein the stage of performing at least one measurement is responsive to the measurement information.

6.   The method of claim 1 wherein the stage of performing at least one measurement comprises measuring at least one feature of at least one structural element within the measurement area.

7.   The method of claim 1 wherein the stage of performing at least one measurement comprises measuring a relationship between multiple structural elements within the measurement area.

8.   The method of claim 1 wherein the stage of locating the measurement area comprises: (i) locating a vicinity area that comprises the measurement area; (ii) locating the measurement area by applying image processing.

9.   The method of claim 1 further comprising generating measurement image information from a SEM image.

10.   The method of claim 1 further comprising generating measurement image information from CAD information.

11.   The method of claim 1 comprising a repetition of a stage of generating a measurement model until one or more criteria are fulfilled.

12.   The method of claim 1 further comprising repeating a stage of generating a measurement model until one or more criteria are fulfilled.

13.   A measurement system comprising: a scanner for scanning an measurement area with a beam of charged particles; a detector, positioned to receive charged particles resulting from an interaction between the measurement area and the beam of charged particles and to provide multiple detection signals; and a processor, adapted to process detection signals and to control the scanner; whereas the measurement system is adapted to receive a measurement model that comprises measurement image information; to locate a measurement area by utilizing the measurement image information; and to perform at least one measurement to provide measurement result information.

14.   The measurement system of claim 13 whereas the measurement modes further comprises edge information.

15.   The measurement system of claim 14 whereas the measurement system is adapted to perform at least one measurement in response to the edge information.

16.   The measurement system of claim 13 wherein the measurement model further comprises measurement information.

17.   The measurement system of claim 16 whereas the measurement system is adapted to perform at least one measurement in response to the measurement information.

18.   The measurement system of claim 13 wherein the measurement system is adapted to perform at least one measurement of at least one feature of at least one structural element within the measurement area.

19.   The measurement system of claim 13 wherein the measurement system is adapted to perform at least one measurement of a relationship between multiple structural elements within the measurement area.

20.   The measurement system of claim 13 wherein the measurement system is adapted to locate the measurement area by a location of a vicinity area that comprises the measurement area; and by a location of the measurement area by applying image processing.

21.   A measurement system comprising: a scanner for scanning an measurement area with a beam of charged particles; a detector, positioned to receive charged particles resulting from an interaction between the measurement area and the beam of charged particles and to provide multiple detection signals; and a processor, adapted to process

detection signals and to control the scanner; whereas the measurement system is adapted to generate a measurement model that comprises measurement image information; to locate a measurement area by utilizing the measurement image information; and to perform at least one measurement to provide measurement result information.

22.   The measurement system of claim 21 adapted to generate measurement image information from a SEM image.

23.   The measurement system of claim 21 adapted to generate measurement image information from CAD information.

24.   The measurement system of claim 21 whereas the measurement modes further comprises edge information.

25.   The measurement system of claim 24 whereas the measurement system is adapted to perform at least one measurement in response to the edge information.

26.   The measurement system of claim 21 wherein the measurement model further comprises measurement information.

27.   The measurement system of claim 26 whereas the measurement system is adapted to perform at least one measurement in response to the measurement information.

28.   The measurement system of claim 21 wherein the measurement system is adapted to perform at least one measurement of at least one feature of at least one structural element within the measurement area.

29.   The measurement system of claim 21 wherein the measurement system is adapted to perform at least one measurement of a relationship between multiple structural elements within the measurement area.

30.   The measurement system of claim 21 wherein the measurement system is adapted to locate the measurement area by a location of a vicinity area that comprises the measurement area; and by a location of the measurement area by applying image processing.